

Tuesday 09/19/2017

The Environmental Response Team's (ERT's) mobile laboratories, using the Trace Atmospheric Gas Analyzer (TAGA) tandem mass spectrometer system, performed mobile air monitoring near Corpus Christi, Texas. The TAGA 1 conducted air monitoring near Flint Hills West, Valero East, Equistar, Equistar Chemicals Dock Facility, Flint Hills East, Citgo East, Citgo West, and Valero West in Corpus Christi, Texas. No readings were above the Texas Commission on Environmental Quality (TCEQ) Air Monitoring Comparison Values (AMCVs) short-term comparison levels were detected. The TAGA 2 generator failed at the end of the day and was unable to run the post calibration performance standards. Without the post calibration standards, the post processing could not be performed and no post processed data were available. The TAGA 2 locations were completed successfully 09/20/17 with no monitoring results above the TCEQ comparison levels. The air monitoring conducted on Tuesday 9/19/2017 indicated that the TAGA-specific analytes were below the TCEQ comparison levels (short-term Air Monitoring Comparison Values (AMCVs)). Therefore, it appears that there is no significant air concern based upon the TCEQ comparison levels.

What's an AMCV

AMCV is a collective term used to describe chemical specific air concentrations used to evaluate air monitoring data that are set to protect human health and welfare. Short-term AMCVs are based on data concerning acute health effects. AMCVs may contain health -based Reference Values (ReVs) and health- and welfare-based ESLs.

AMCVs are screening levels used in TCEQ's evaluation of ambient air monitoring data to assess the potential for measured concentrations of specific chemicals to cause health or welfare effects. Health-based AMCVs are levels at which exposure is unlikely to result in adverse health effects.

Substance	CAS #	TAGA detection limit (ppbv)	TCEQ short-term AMCV (ppbv)
1,1,1-trichloroethane	71-55-6	1	1700
1,1-dichloroethane	75-34-3	1	1000
1,1-dichloroethylene	75-35-4	1	180
Benzene	71-43-2	1	180
ethylbenzene	100-41-4	1	20000
m/p-xylene	179601-23-1	1	1700
methyl tert-butyl ether	1634-04-4	1	500
o-xylene	95-47-6	1	1700
tetrachloroethylene	127-18-4	1	1000
Toluene	108-88-3	1	4000
trichloroethylene	79-01-6	1	100